Australian Entomologicalicronia Magazine

Aust. ent. Mag.

Volume 8, Part 1

June, 1981

- 3 JUL 1981

THE FOOD PLANTS OF JALMENUS EVAGORAS (DONOVAN) (LEPIDOPTERA: LYCAENIDAE)

By T. J. Hawkeswood

Department of Botany, James Cook University of North Queensland, Townsville, Queensland, 4811

Abstract

A new larval food plant, Acacia ingramii Tindale, is recorded for Jalmenus evagoras evagoras (Donovan) from the Armidale district, New South Wales. The literature giving food plant data for J. evagoras (Donovan) is summarized. The 15 known larval food plants, all of which are Acacia species, are listed. Acacia botrycephala (Vent.) Desf., recorded as a larval food plant of Jalmenus evagoras evagoras and Pseudalmenus chlorinda chloris Waterhouse and Lyell, should now be known as Acacia terminalis (Salisb.) Macbride.

On Christmas Day, 1978, a visit was made to Dangars Falls, about 20 km ESE of Armidale, New South Wales $(30^{\circ}41'S, 151^{\circ}44'E)$. Here five pupae and two second instar larvae of *Jalmenus evagoras evagoras* (Donovan) were collected from a small bush of *Acacia ingramii* Tindale, a food plant previously unrecorded for this butterfly. This species is usually a spreading, bushy shrub growing to 2.5 m in height, but sometimes growing as an erect tree to 7.5 m in height. It is related to *A. neriifolia* A. Cunn. ex Benth., but differs in its growth habit and has narrower phyllodes with midribs bearing short, stiff hairs (Tindale, 1978). *A. ingramii* is confined to the Dangars and Wollomombi Falls areas, and the Gara and Oaky River districts of the upper Macleay River catchment in north-eastern New South Wales (Tindale, 1978). Harslett (1965) recorded *A. neriifolia* as a food plant from near Stanthorpe, Queensland, so it is unlikely that she confused *A. neriifolia* with *A. ingramii*.

All of the fifteen known food plants of Jalmenus evagoras (Donovan) belong to the genus Acacia. Thirteen of these are for J. evagoras evagoras: Acacia binervata DC. (Chisholm, 1925); A. cunninghamii Hook. (Manski,

1960); A. dealbata Link (Barnard, 1889; Crosby, 1951); A. decurrens (Wendl.) Willd. (Froggatt, 1892, 1902; Thorn, 1924; Borch, 1928; Harslett, 1965); A. falcata Willd. (Common and Waterhouse, 1972); A. ingramii (Hawkeswood, this paper); A. irrorata Sieb. ex. Spreng. (Common and Waterhouse, 1972); A. mearnsii De Wild (Thorn, 1924; Coleman, 1943); A. melanoxylon R. Br. (Chisholm, 1925); A. neriifolia A. Cunn. ex Benth. (Harslett, 1965); A. rubida A. Cunn. (Common and Waterhouse, 1972); A. spectabilis A. Cunn. (Harslett, 1965); A. terminalis (Salisb.) Macbride [known prior to Tindale, 1975 as A. botrycephala (Vent.) Desf.] (Common and Waterhouse, 1972). Two food plants are recorded for J. evagoras eubulus Miskin: A. penninervis Sieb. ex DC. (Waterhouse, 1932); A. harpophylla F. Muell. (Waterhouse, 1932).

The records by Common and Waterhouse (1972) of A. falcata, A. *irrorata*, A. *rubida* and A. *terminalis* (as A. *botrycephala*) are presumably from previously unpublished information. They overlooked Chisholm's (1925) record of A. *binervata*.

A. terminalis has also been recorded as a food plant for Pseudalmenus chlorinda chloris Waterhouse and Lyell by Binns (1976) where it again appears as A. botrycephala.

Acknowledgements

I would like to thank Mr M. S. Moulds for his assistance in the preparation of this paper. I also wish to thank Mr J. D. O'Dea, Department of Physiology, University of New England, Armidale, for his comments and suggestions.

References

- Barnard, F. G. A., 1889. Notes on the butterfly, *Ialmenus evagoras*, Don. Victorian Nat. 5: 168.
- Binns, D., 1976. Interesting butterfly records from southern Queensland and central New South Wales. Aust. ent. Mag. 3: 73-74.
- Borch, C. H., 1928. Life histories of some Victorian lycaenids. Victorian Nat. 45: 188-193.
- Chisholm, E. C., 1925. The principal fauna of the Comboyne Plateau, 1923-1925. Aust. Zool. 4: 54-74.

Coleman, E., 1943. Note on butterflies. Victorian Nat. 59: 188.

- Common, I. F. B. and Waterhouse, D. F., 1972. Butterflies of Australia. Angus and Robertson, Sydney, 498 pp.
- Crosby, D. F., 1951. Note on some eastern Victorian butterflies, with a new Victorian record. Victorian Nat. 68: 97-101.
- Froggatt, W. W., 1892. Notes and exhibits. Proc. Linn. Soc. N.S.W. (2)7: 40-41.
- Froggatt, W. W., 1902. Insects of wattle trees. Agric. Gaz. N.S.W. 13: 701-720.
- Harslett, J., 1965. Butterflies from the Stanthorpe district, Queensland, with notes on their food plants. Qd Nat. 17: 106-112.
- Manski, M. J., 1960. Food plants of some Queensland Lepidoptera. *Qd Nat.* 16: 68-73. Thorn, L. B., 1924. Notes on the life-histories of some Victorian lycaenid butterflies. *Victorian Nat.* 41: 43-50.

Tindale, M. D., 1975. Notes on Australian taxa of *Acacia*. No. 4. *Telopea*. 1: 68-83. Tindale, M. D., 1978. Notes on Australian taxa of *Acacia*. No. 5. *Telopea*. 1: 371-386. Waterhouse, G. A., 1932. *What butterfly is that?* Angus and Robertson, Sydney. 291 pp.